

IN THE CLAIMS

a1  
Sub C1  
1. (Amended) ~~Substantially pure~~ connective tissue growth factor (CTGF) polypeptide or [functional] fragments thereof which are mitogenic and chemotactic for connective tissue cells.

a2  
Sub C2  
14. (Amended) Antibodies which [are] specifically [reactive with] bind CTGF or fragments thereof.

Please cancel claims 2 and 3.

REMARKS

These remarks are in response to the Office Action of May 4, 1992. Claims 1 and 14 have been amended. Claims 2 and 3 have been cancelled. No new matter has been added. Consequently, claims 1, 4 and 14-16 are pending in the present application.

THE INVENTION

The present invention teaches the isolation and characteristics of a previously unknown factor designated Connective Tissue Growth Factor (CTGF), which is related immunologically to Platelet Derived Growth Factor (PDGF). Various cell types produce and secrete PDGF and PDGF-related molecules. While investigating PDGF dimers present in the growth media of cultured endothelial cells, the Applicants discovered a new growth factor. This protein plays a role in the normal development, growth and repair of human tissue. The discovery of the CTGF protein and cloning of DNA which encodes this molecule is significant in that it is a previously unknown growth factor having mitogenic and chemotactic activities in connective tissue cells. The biological activity of CTGF is